

Physics 201 General Physics I Syllabus

Course Description: In depth treatment of Mechanics, Sound, and Heat. *This course has been identified by the GEAC/QEP as a general education core course.*

Prerequisite Requirements: MATH 113 or MATH 170 or permission of Department head.

Textbook: Physics, 7th edition, by Cutnell and Johnson (required).

Course Objectives: The student will develop a basic understanding of Newtonian mechanics.

Student Learning Objectives: Students completing this course will be able to:

- 1) Understand apply numerical data and statics.*
- 2) Understand and apply basic concepts of vector math.
- 3) Understand and apply kinematic principle.
- 4) Understand and apply Newton's laws of motion.
- 5) Understand and apply concepts involving work and energy.

Methods of Instruction: Lectures, Reading, Homework, and Laboratory.

***Assessment:** Student learning will be assessed through embedded questions in examinations and/or questionnaire, homework.

Course Availability: This course is available at <http://blackboard.mcneese.edu>

Course Content and Topical Outline:

- I. Measurement
 - A. SI System (Chapter 1)
 - B. Vectors (Chapter 1)
- I. Kinematics and Motion
 - A. Motion in one dimension (Chapter 2)
 - B. Vectors and motion in more than one dimension (Chapter 3)
 - C. Newton's Laws of Motion (Chapter 4)
 - D. Circular Motion (Chapter 5)
- II. Energy, Conservation and Momentum
 - A. Work and Energy (Chapter 6)
 - B. Conservation of Energy (Chapter 6)
 - C. Collisions and systems of particles (Chapter 7)
 - D. Conservation of Momentum (Chapter 7)
 - E. Rotational Kinematics and Dynamics (Chapter 8 and 9)

Test 1: Chapters 1, 2, 3

Test 2: Chapters 4, 5, 6

Test 3: Chapters 7, 8, 9

COURSE POLICIES:

- **Homework:** It cannot be overemphasized the importance of spending time on homework assignments. Homework will be given throughout the semester and will be graded for demonstration of understanding, completeness, accuracy, and neatness. Homework will consist of

problems given from each chapter and should be worked out showing all formulas in as much detail as possible. NO LATE submissions are accepted. If you are absent the day it is due, you are to turn it in early or at the **next** class meeting (the day you return). Any homework not turned in will be a **zero**. No Homework grades will be dropped.

- **Exams:** 3 exams (closed book) will be given that count 40% towards your final grade. You must show up on time for all tests, including the final. If a student shows up after a test has already been completed and turned in, that student will not be allowed to take the test. Calculators are allowed during the test. Cell phones, blackberries, and other electronic devices are not allowed during the test or final.
- **Make-ups:** There will be three tests given during the course. Students who miss examinations or required class assignments due to an excused absence or a planned absence for University approved events must present the approved University excused absence to the instructor prior to missing. Those students with an excused absence and notify instructor prior to missing the test will be allowed to make up the test. Students with an unexcused absence will be a reweighting of the final exam and are at the instructor's discretion. Please do not miss the day of the tests.
- **Final Exam:** The final exam (closed book) will include all topics in the course. The final exam is comprehensive and mandatory for all students. A student will receive a failing grade if they do not take the final.
- **Attendance:** Regular class attendance is essential to success in this course. Attendance will be taken at each class. If a student's total number of absences (excused or unexcused) exceeds forty percent of the total classes, the instructor reserves the right to assign a WN for non-attendance or assign a grade of F for a final grade, at the instructor's discretion. A WN is only given for those students missing class due to extended medical problems after the drop date. Students should not assume they will receive a WN for non attendance.
- Students must understand that they are responsible for all material covered and assigned during their absences (excused and unexcused) and that they are responsible for the academic consequences of their absences.

Grading Policy:

Grades will be based on homework, lab, tests and final exam. Laboratory is a requirement for the course, and as such will be a part of the grade. If you drop the class you **must** also drop the lab. Attendance to class and lab is essential for your grade in this course.

The final grade assessment for this course will be based on the following:

- Homework15%
- 3 Exams40%
- Final exam.....20%
- Laboratory.....25%

Letter grades will be assigned on the following scale:

- A: > 89.5 %
- B: 79.5-89.4%
- C: 64.5-79.4%
- D: 55.0-64.4%
- F: < 55%

there is **NO CURVING** in this class. These grade breaks are **FINAL**.

There is no extra credit for the course. Students should begin the semester with this in mind and attempt all course work to the best of their ability in order to receive as much credit as possible during the semester.

Cell phones should be turned off or set to vibrate mode. Students should leave class to answer any phone

calls and are responsible for everything covered in class during absence.

Classroom Behavior:

It is expected that all students will act in a manner to promote the best learning environment for all students. As such, offensive or demeaning comments (including racial, religious, ethnic, or sexist slurs) and disruptive behavior will not be permitted. Offending students will be asked to leave the class until such time as they can conform to this behavior policy.

Academic Integrity:

McNeese State University seeks to strengthen the value of the student's academic achievement by fostering a learning environment which is based on honesty, respect, fairness, responsibility, and excellence. Consequently, the University expects that all students will uphold the highest standards of academic integrity and demonstrate honesty and integrity in all academic relationships. Plagiarism, cheating, and academic fraud will be dealt with according to MSU policies and may result in failure of the either the assignment or the course. Students are expected to read and adhere to the MSU academic integrity policies in the McNeese State University Catalog or visit the web site at www.mcneese.edu/integrity.

Diversity and Sexual Harassment Policy:

Students should visit the MSU webpage at www.mcneese.edu/policy/diversity/htm for information about diversity and sexual harassment policies and procedures.

Students with Disabilities:

Any student with a disability is encouraged to contact the Office of Services for Students with Disabilities in Drew Hall, Room 200, voice (337) 475-5916; hearing impaired (337) 475-5722. It is each student's responsibility to register with the Office of Services for Students with Disabilities when requesting a reasonable accommodation and contact their instructor, in a timely fashion, regarding reasonable accommodation needs. Please visit www.mcneese.edu/policy/ada.php for details. A student with a disability is responsible for locating the emergency exits and the areas of refuge in a classroom building. The student is then encouraged to develop an evacuation plan and discuss the plan with the instructor.

Fire Drill Policy:

McNeese State University will periodically conduct fire drills. In the event of a fire drill or a related building emergency, all persons in a classroom are required to exit the building using posted escape routes or the Area of Refuge for individuals with disabilities.